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(54) **METHOD FOR SOFTWARE DISTRIBUTION AND COMPENSATION WITH REPLENISHABLE ADVERTISEMENTS**

6,036,601 \* 3/2000 Heckel ..... 463/42  
6,141,010 \* 10/2000 Hoyle ..... 345/356

## FOREIGN PATENT DOCUMENTS

WO 99/62013 \* 12/1999 (WO).

## OTHER PUBLICATIONS

Watt: "Pushing back: broadcast technology streamlines intranet traffic. (digital broadcasting on the internet)(Intra-Net: A Network World Supplement)(Internet/Web/Online Service Information)"; Network World, Jan. 20, 1997, v14, n3, pS17, (Abstract Only).\*

"Updates.com Delivers the Message with AdSync; (www).updates.com a Free Web-Based Updating Service for PC User's"; Business Wire, Apr. 6, 1999.\*

"Feedback"; PC Magazine, Aug. 29, 2000, p. 67.\*

Juno and BMG Entertainment Join Forces to Distribute Free E-mail Across the United States; New York, NY; Juno home page, Jul. 1996.\*

(List continued on next page.)

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(56) **References Cited**

## U.S. PATENT DOCUMENTS

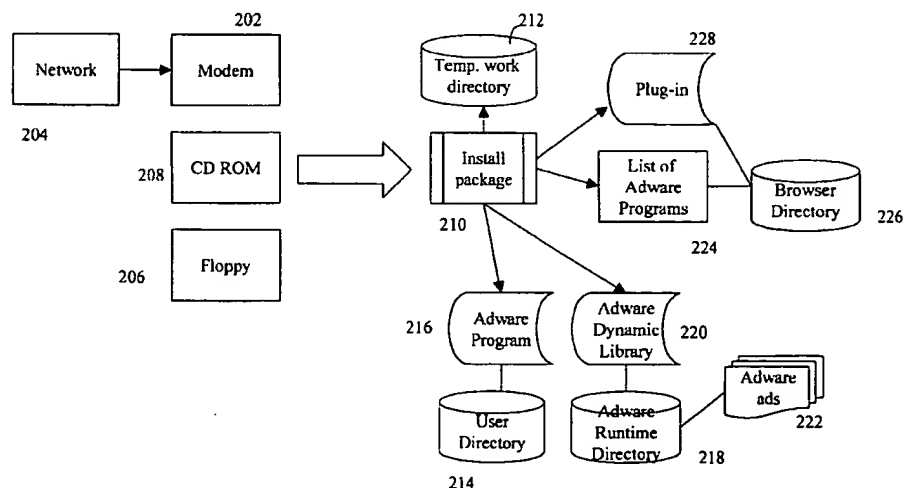
5,014,234 \* 5/1991 Edwards, Jr. .... 713/200  
5,564,073 \* 10/1996 Takahisa ..... 455/66  
5,572,643 \* 11/1996 Judson ..... 709/218  
5,579,537 \* 11/1996 Takahisa ..... 455/66  
5,740,549 \* 4/1998 Reilly et al. .... 705/14  
5,765,141 \* 6/1998 Spector ..... 705/14  
5,774,868 \* 6/1998 Cragun et al. .... 705/10  
5,774,869 \* 6/1998 Toader ..... 705/10  
5,781,894 \* 7/1998 Petrecca et al. .... 705/14  
5,809,242 \* 9/1998 Shaw et al. .... 395/200.47  
5,848,397 \* 12/1998 Marsh et al. .... 705/14  
5,854,897 \* 12/1998 Radziewicz et al. .... 395/200.54  
5,903,721 \* 5/1999 Sixtus ..... 395/187.01  
5,913,030 \* 6/1999 Lotspiech et al. .... 395/200.33  
5,918,014 \* 6/1999 Robinson ..... 395/200.49  
5,918,214 \* 6/1999 Perkowski ..... 705/27  
5,919,247 \* 7/1999 Van Hoff et al. .... 709/217  
5,937,037 \* 8/1999 Kamel et al. .... 379/88.19

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(57) **ABSTRACT**

A method and system for offering and distributing software wherein advertisements are incorporated into the software product, wherein author compensation is based on advertisement generated revenues. In accordance with the features of this invention, the advertisements are loaded into the Random Access Memory of the computer whenever the software is invoked and are displayed before the software can be used. Moreover, advertisements are periodically refreshed by automatically accessing computer servers on the Internet and downloading and installing the advertisements on the computer's hard disk and usage records which can be used for author compensation are uploaded to the server. Computer users are given the option of disabling the advertisements by paying for the software.

16 Claims, 5 Drawing Sheets



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TITLE: Method for software distribution and compensation with replenishable advertisements

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It is also known that the state of the art for advertising on personal computers (PCs) currently consists of Internet advertising that is displayed using World Wide Web (or Internet) browser software. As users browse the Internet, the various sites they visit **display advertisements** of a random nature or advertisements that are related to the content of the Web pages being browsed. Although this method of advertisement is growing rapidly it is not ideal in several respects. Web page based advertisements are easy to ignore. They generally occupy a small area of the computer monitor's display and are inconsistent in appearance with the material that hosts them. Internet users quickly adjust and typically ignore advertisements. To solve this problem, Web based advertisements are becoming more striking in appearance and are making use of animation. However, the advertisement's animation requires additional time when loading a Web page into a user's browser and ultimately detracts from the material that hosts the advertisement.

Because of television, most people in this country are accustomed to the concept of **viewing advertisements** in exchange for having free access to programming. However, people who work rarely, if ever, view traditional media Advertisements (i.e., television ads) during business hours. Similarly, few people access the Internet for casual browsing during business hours, instead saving casual Internet use until evening.

Consequently, because of the increase in the number of people who access the Internet in the evening, fewer people are being exposed to main stream advertisements during the time period when traditionally most people **viewed advertising** on television. For these reasons, it is desirable for the advertisement industry that an effective method of advertising on the Internet should be developed. This advancement would enable the industry to expose users to advertisements both during the work day and especially during the evening hours.

The invention as disclosed herein realizes a major advancement in the state of the art by providing a means for collecting payment for software programs distributed via the Internet. With this invention, software programs are paid for by sponsors who have advertisements inserted into the programs either prior to or as the software is being downloaded onto a user's computer. In this manner, authors of software programs can guarantee that they will receive payment for their products. Instead of being damaged, the software authors and sponsors of the advertisements actually receive additional benefit when users copy and distribute software to friends and colleagues. Normally this practice is illegal and deprives authors of rightful revenues. But with this invention, software authors are paid by advertisers and the advertisers actually benefit by widespread distribution of the software. Regardless of the means, distribution insures that a wider audience will view the advertisements and the value of the advertisements will increase.

In another aspect of the invention, a plug-in module is downloaded in conjunction with the software program and advertising modules and is installed within the computer's Web browser program. This module enables the content of the advertisements embedded within the software to be periodically updated. The browser plug-in module also enables the host computer to regularly determine the number of times the particular customer has used the downloaded software and viewed the advertisements. The browser plug-in periodically transmits this data to a Web server where it can be accessed by advertisers.

FIG. 4 is a continuation of FIG. 3 illustrating how the Adware advertisements within the advertisement module 222 are periodically replaced by advertisements from the server 102 (FIG. 1). As described above, by changing the content of the advertisements, this feature of the invention helps prevent a user of Adware programs from losing interest and ignoring the advertisements. This feature also enables statistics kept on advertisement viewing to be downloaded from a computer 110-114 to a server 102. These statistics inform advertisers concerning both the frequency their advertisements are being viewed and the number of computers on which their advertisements reside. In instances when the user has downloaded more than one Adware program, statistics also are kept on the number of times each program has been run. All these statistics will help advertisers judge the value of their advertisements and select the type of computer programs they may choose to sponsor. FIG. 4 can also be a continuation of FIG. 5. FIG. 5 presents users with the opportunity of downloading and viewing advertisements other than the advertisements 222.

At step 338 in FIG. 3, a determination was made whether the advertisement was

an interactive advertisement. If a "yes" determination was made, execution proceeded to step 340, wherein execution proceeded to FIG. 5 and step 500. Execution then immediately proceeds to step 502. At step 502, a determination is made whether data is input by the user in response to the advertisement. It is known in the art that computer users can input data via a number of different input devices, such as a computer keyboard, mouse, joy stick, or some other input device. These devices are used to collect user inputs in response to on-screen prompts that are created and presented by the interactive advertisement. If the user fails to respond to the interactive advertisement, then a "no" determination is made and execution progresses to step 504. At step 504, the program closes because a response to the interactive advertisement is required before the program runs. In an alternative embodiment, interaction with the advertisement is optional and the execution returns to FIG. 3 at step 340 where the execution proceeds to step 342 and program is executed. In yet another alternative, text, graphics or some other media is output to the monitor explaining to the user that he or she must respond to the advertisement in order to access the program. If at step 502 a determination is made that the user has responded to the advertisement, then execution progresses to step 506. It should be noted that there are numerous ways that an interactive advertisement can be constructed and that a user may interact with that advertisement. For example, the advertisement may contain hyperlinks that will connect the user to an on line server or to other advertising modules. As another example, the advertisement may contain a survey and the user provides answers to questions such as, "What color automobiles do you prefer?" In this instance, the user could manipulate an image of the product with the answers to the survey. Using the example above, the user could manipulate an image of the product with the answers to the survey, i.e., the image of the automobile would turn sky blue in response to the user's response. The interactive advertisement could also output print data to a printer connected to the computer 110 that could print one or multiple coupons or rebate offers. As an incentive, with this option, the advertisement software could postpone printing the coupon or rebate offer until the user answers all the questions in the survey or until the data accumulated in response to the survey is transmitted to a server 102.

At step 506, a determination is made as to whether the user wants to purchase the software in order to disable the advertisement functionality. This determination could be made by answering the question in a survey or by activating a hyperlink with a "yes/no" type answer. If a "no" determination is made, execution proceeds to step 508. Providers of the Adware software or the author of the software may choose to omit this option, in which case execution proceeds to step 508. The interactive software could also give users the opportunity to disable this step, thus making an ongoing decision to view the advertisements rather than purchase the program. At step 508, a

determination

is made whether the user wishes to purchase the advertised product. As with step 506, this determination may be made by one of several methods, most likely

by activating a hyperlink. If the user decides to purchase the product and responds with the appropriate data input, then a "yes" determination is made and execution proceeds to step 510. If however, a "no" determination is made, execution proceeds to step 512. At step 512 a determination is made whether the user desires additional information about the advertised product. For example, the advertisement could be for a new hard drive for a personal computer or for a new Adware software package. The additional information could contain specifications for the hard drive or a sample of the software's functionality. Typically the user responds by activating a hyperlink. If a "yes" determination is made, execution proceeds to step 510. If the user indicates that he or she does not desire additional information, then a "no" determination is made and execution proceeds to step 514.

At step 514 a determination is made whether the user wishes to view other advertisements or replace the advertisements currently saved on the hard disk of the computer 110. If a "yes" determination is made, execution proceeds to step 516 wherein execution then proceeds to FIG. 4. At FIG. 4, as described above, a routine is initiated for downloading new advertisements and the present interactive routine is closed. As an alternative embodiment (not illustrated), the user can be linked to the server 102 or to some other server connected to the Internet 104 and can view advertisements without having them

installed onto the computer 110 hard disk. Having accessed other advertisements, options such as those represented in step 508 and 512 can be presented again. If a "no" determination is made, execution proceeds to step 518. Step 518 is representative of all other types of responses possible with an interactive advertisement. These responses primarily represent data that can be helpful to the advertisers, i.e., answers to surveys, consumer opinions on new or existing products, etc. The data may also be used by the advertiser in the future to assist in selling the advertised product or some other product to the user. It should be noted that any of the interactive determinations 506, 508, 512, 514 and 518 may be included in the execution as described herein

or may be omitted. It is also possible that the determinations may be made in a different order, i.e., determination 508 made first and 506 made last. After data input in response to the interactive advertisement is completed, execution proceeds to step 510.

1. A method for distributing computer software data wherein compensation for the authors and owners of said software data is based upon the viewing an

**advertisement**, the method comprising:

coupling said advertisement to said software data, said coupling requiring the user to **view the advertisement** before using said software data;

coupling requiring a user to **view the advertising** before the user is able to utilize the software data;

16. A method for distributing computer software programs and data wherein compensation for the authors and owners of said software and data is based upon

the **viewing of advertisements** as an alternative to standard retail and wholesale sales, the method comprising: